REMARKS

Claims 1-15 are pending in the application; of these, claims 1, 8, 9 and 11 are

independent. Claims 1 and 11 have been amended and claims 13-15 have been added by the

foregoing amendment.

Applicants appreciate the Examiner's consideration, and making a record, of documents

submitted in an Information Disclosure statement.

Claims 1-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jaffe in

view of U.S. Patent No. 5,822,606 ("Morton"). Claims 8-12 were rejected under 35 U.S.C. §

102(b) as being anticipated by U.S. Patent No. 5,410,727 ("Jaffe et al."). Applicants respectfully

request withdrawal of these rejections in view of the following remarks.

Applicants' invention is directed to methods and apparatus for controlling the processing

of plurality of data streams. A SIMD architecture may be used. As recited in amended claim 1,

for example, a SIMD controller for processing a plurality of data streams in a digital subscriber

line (DSL) system comprises: a plurality of circular buffer circuits that store data from the

plurality of data streams having independent data rates; a plurality of address generation circuits

that access the data stored in the plurality of circular buffer circuits; a plurality of processor

circuits that process the data accessed by the plurality of address generation circuits; and

a program control unit that controls the plurality of processor circuits with an instruction.

Jaffe describes an I/O system interfacing with a SIMD engine in a massively parallel

computer system. Jaffe transfers an entire block of data in a single clock cycle and performs data

manipulation (using "corner turning buffers") to change the format and involves temporary

storage as well as a SIMD storage location. The temporary storage area allows data in different formats to be mapped in a format suitable for transfer to the SIMD processing elements.

As recognized by the Examiner, Jaffe fails to disclose circular buffer circuits. Morton is relied upon to overcome this deficiency. However, Jaffe (and Morton) also fail to disclose a plurality of data streams having independent data rates in digital subscriber line system. Jaffe describes processing a continuous block of data (col. 7, lines 4-7) and not a plurality of data streams having independent data rates. Furthermore, the circular buffers of Morton do not process a plurality of data streams.

As the teachings of Jaffe and Morton, either taken alone or in any combination, fail to disclose Applicants' invention as recited in claim 1, it is believed that claim 1 is allowable.

Similarly, with respect to claims 8, 9 and 11, Jaffe fails to disclose a plurality of data streams in a digital subscriber line system. Jaffe describes a continuous block of data being processed. Furthermore, with respect to claim 9, Jaffe also fails to disclose the storing of data in memory de-coupling a first operating rate of the processor and a second operating rate of the plurality of channels.
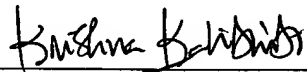
At least for these reasons, it is believed that claims 8, 9 and 11 are allowable over the teachings of Jaffe.

The remaining claims (i.e. 2-7, 10, 12 and 13-15) all depend on one of independent and allowable claims 1, 8, 9 and 11. Accordingly, these claims are allowable.

All of the rejections having been overcome, it is respectfully submitted that this application is in condition for allowance and a notice to that effect is earnestly solicited. Should the Examiner have any questions with respect to expediting the prosecution of this application, he is urged to contact the undersigned at the number listed below.

Respectfully submitted,

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